

REMARKS/ARGUMENTS

Claims 14-15, 17-21 and 23-25 are active in this case.

Support for the amendments to Claims 14 and 20, i.e., the gene/enzymes and the specification is found as follows:

SPAC14C4.15c is found in Example 5(3) of the PCT application from which the present application claims priority and the contents of which were incorporated by reference (see box 17 of the Utility Patent Application Transmittal filed with the application on December 1, 2003);

SPAC4A8.04 is found in Example 2 of the present application;

SPAC4F10.02 is found in Example 3 of the PCT application noted above;

SPACUNK4.12c is found in Example 5(6) of the PCT application noted above; and

SPAC3H1.05 is found in Example 5(10) of the PCT application noted above.

No new matter is added by the presentation of these amendments.

The rejection based on in Egel-Matani is no longer applicable as the YAP3 type protease has been removed from the claims. The cited reference describe or otherwise suggest deleting or inactivating one or more specific genes in *S. pombe* nor that by doing so, efficient production of heterologous proteins would result. Indeed, the prior art simply does not provide the expectation that experience in one cellular system would work nor work as well as it did for the applicants in another completely different system, *S. pombe* in the claims.

The role of a certain gene and its effects, when deleted in one yeast are different from a corresponding or similar gene in another yeast species. For example, *S. pombe* has greater than 60 protease genes and the effect of removing those on the production of heterologous

proteins would not have been clear to one in this field when the application was filed. As there was no guidance in the art nor expectation of success as to which genes (as identified in the claims) could be deleted to enhance heterologous protein production, the claims would not have been obvious.

Withdrawal of this rejection is requested.

To the objection to Claims 15-19 and 21-25, the remaining claims do limit the claims from which they depend as they specify a particular gene, now also including the database identifier.

To the rejection under 35 USC 112, second paragraph, the enzymes notations have been corrected based on the specification as originally filed and the PCT application to which the present application claims priority as explained above. Therefore, the problems in identifying those enzymes in the genome database should not longer be present.

Withdrawal of the rejection is requested.

A Notice of Allowance for all pending claims is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, he is encouraged to contact Applicants' undersigned representative.

Withdrawal of this rejection is requested.

Applicants also request a Notice of Allowance for all pending claims.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman F. Oblon



Daniel J. Pereira, Ph.D.
Registration No. 45,518

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)